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| 09/625,252 | 07/25/2000 | Jean M. McManus | Bell-33 | 7622 |
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| VERIZON CORPORATE SERVICES GROUP INC. C/O CHRISTIAN R. ANDERSEN 600 HIDDEN RIDGE DRIVE MAILCODE HQEO3H14 IRVING, TX 75038 | | | EXAMINER STRANGE, AARON N | |
| | | | ART UNIT 2153 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/625,252

Applicant(s)

MCMANUS, JEAN M.

Examiner

Aaron Strange

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendments to claim 38 are sufficient to overcome the rejection of that claim presented under 35 USC 112, 2nd paragraph. That rejection is hereby withdrawn.

Response to Arguments

2. Applicant's arguments filed 10/27/2005 have been fully considered but they are not persuasive.

3. With regard to claims 1,12,and 20, and Applicant's assertion that these claims are not anticipated by Locklear since "modems are added or removed with respect to an established session" (Page 12, Lines 24-28 of Remarks), the Examiner respectfully disagrees. As discussed in the Office action of 7/27/2005 (¶4), Locklear also discloses selecting modems and links in the process of establishing a session. The portions of Locklear cited in the rejection of claims 1,12, and 20 begin with "To initiate a session" (Col 5, Line 1), and then describe a series of steps including the selection of lines and modems. This directly contradicts Applicant's assertion that "the device 12 only 'selects' modems and links once the session is already established" (Page 12, Lines 33-35 of Remarks). It is apparent that a session cannot possibly be "established" prior to being "initiated", since Locklear discloses that session data is not exchanged until "the communication path is set up" (Col 5, Lines 38-40).

4. With further regard to claims 1,12, and 20, and Applicant's assertion that "the device 12 in the Locklear patent" "identifies available links and communicates a session request over each and every one of the available links" and that this is somehow different from the claimed invention in which "non-selected links do not forward such data" (Page 13, Lines 14-20 of Remarks), the Examiner respectfully disagrees. As discussed in detail in the Office action of 7/27/2005 (¶4), the Locklear system forwards data only over the links "identified **for the session**" (Col 5, Lines 5-7). The server responds to each and every request forwarded over a selected line by selecting an available modem and training it for the associated twisted pair line (Col 5, Lines 25-37).

If, as Applicant asserts, the system sent a request for service over all available lines, rather than only the lines identified for the session, all available lines would be taken by the first session, leaving no available lines for any additional sessions. It would be illogical to select all available links for a session that will require only a single line, and such an interpretation of Locklear is simply unsupported by any disclosure contained in the Locklear patent.

5. With regard to claim 4, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Applicant merely provides a general assertion that "these claims more clearly distinguish the present invention over the Locklear

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patent and the Mamakos RFC", and appears to be based at least in part on the idea that the Locklear patent sends a session request over "each and every available link", which is untrue, as discussed above.

6. With regard to claims 8, 19, and 24, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

7. With regard to claims 26-28 and 30-35 and Applicant's assertion that the Locklear patent only prevents looping "after a session has been established", the Examiner respectfully disagrees. As discussed in the Office action of 12/7/52004, Locklear discloses that before a session is established controller 72 and database 74 can be used to select the best communications link for a newly requested session in order to prevent data looping before the session begins (Col 7, Lines 12-29).

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1, 12, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Locklear, Jr. et al. (Us 6,483,870).

10. With regard to claims 1, 12, and 20, Locklear discloses a method for use in a system at a premises, the system having at least one terminal (20), a local area network including the at least one terminal (18), and coupled with units (12) that terminate at least two communication links (22) between the premises and a communications provider facility (16) located off the premises, the method comprising:

- accepting data on the local area network (device 12 receives a session initiation signal from terminal 20) (18, col. 5 line 1-2, col. 6 lines 44-52);
- determining whether the data accepted concerns establishing a connection or is part of an established connection (col. 5 lines 1-5 and 53-67),
- If it is determined that the data accepted concerns establishing a connection (col. 5 lines 1-5), then:
 - Selecting, at the premises, one of the at least two communication links based on policy (available line is identified and selected by the controller in the device 12) (Col 5, Lines 4-5; Col. 6, Lines 53-59),
 - Assigning the selected one of the at least two communication links to a session to be associated with the data accepted (the selected line is assigned to the session) (Col 5, Lines 4-7); and

- Forwarding the data accepted (session request) to only the selected one of the at least two communication links and not to any non-selected ones of the at least two communications links (request for service is sent over the line identified for the session) (Col 5, Lines 5-7); and
- If it is determined that the data accepted is part of an established connection, then forwarding the data accepted to the assigned communication link (Col 5, Lines 40-45).

11. With regard to claims 36-38, Locklear further discloses that the act of selecting is performed before the data is communicated over any of the at least two communication links (Col 5, Lines 1-7).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 2-11, 13-19, and 21-25 is rejected under 35 U.S.C. 103(a) as being unpatentable Locklear, Jr. et al. (Us 6,483,870) in view of Mamakos (RFC 2526: "A Method for Transmitting PPP Over Ethernet").

14. In referring to claim 2, although Locklear shows substantial features of the claimed invention, it does not explicitly point out details of PPPoE. Nonetheless PPPoE is well known method of transmitting multi-protocol packets over a point-to-point link.

In an analogous art, Mamakos shows a method for sending PPPoE frames (section 4).

Given the standard protocol of PPPoE a person of ordinary skill in the art would have realized the advantages of modifying the system shown by Locklear to employ PPPoE in order to connect multiple hosts to a remote site in a cost effective manner (see Mamakos section 1 Introduction).

15. In referring to claim 3, Mamakos shows the act of determining whether connection is new or an established connection is based on Ether-type field of the PPPoE frame (section 3, section 4 Payloads, ETHER_TYPE, see also Locklear col. 6 lines 24-35).

16. In referring to claim 4, Mamakos shows PPPoE discovery initiation packet is for establishing a connection (sec. 5 Discovery Stage, sec. 5.1 PADI).

17. In referring to claim 5, Mamakos shows a packet selected from a group of packets consisting of a PADO packet (section 5.2), and PADR packet (section 5.3), PADS packet and a session stage packet (section 5.4).

18. In referring to claim 6 and 17, Mamakos shows in establishing a connection storing the selected one of the at least two communications links and an associated session ID (section 4, payloads- session ID).

19. In referring to claim 7, Mamakos shows in establishing a connection, storing a terminal ID.

20. In referring to claim 8, 19, and 24, Locklear shows policy wherein communication link is selected from a group of function consisting of traffic, past selection states, terminal source of accepted data, user, time present states (fig. 4 and col. 8 lines 25-38 and col. 7 lines 17-29).

21. In referring to claim 9, Mamakos shows determining that data is part of an established connection and that the data is a request to terminate the connection, then freeing the communication link (sec. 5.5 PADT).

22. In referring to claim 10, Mamakos shows freeing the selected one of the at least two communications links and permitting the stored selected one of the at least two communications links and the associated session ID to be over written (Mamakos section 5.5, see also Locklear col. 5 line 57-61).

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23. In referring to claim 11, Locklear shows connection is a connection (22) to a session server (16) (fig. 1).

24. In referring to claim 13, Mamakos shows receiving session offer (PADO packet), forwarding the session offer towards the terminal which requested the session (section 5.2).

25. In referring to claim 14, Mamakos shows receiving a session acceptance (PADR) from the at least one terminal, forwarding the session acceptance to the assigned one of the at least two communication links (section 5.3).

26. In referring to claim 15, Mamakos shows receiving data associated with session identification and forwarding the data to the selected communication link (sec. 6).

27. In referring to claim 18, Locklear shows forwarding session request to a communication link (22), and forwarding the session request and the assigned communications link to a line forwarding process (communication server 16) (col. 7 lines 28-34), and forwarding the session request from the line forwarding process to the assigned communication link (col. 7 line 28-30).

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28. In referring to claim 21, Mamakos shows a link termination unit, each link termination units terminating an associated one of the communication links (sec. 5.5 PADT).

29. In referring to claim 22 and 29, Locklear shows each link termination units as a DSL terminating unit-remote (col. 1 lines 52-58).

30. In referring to claim 23, Locklear shows storage device for storing policies used for selecting one of the communication links to select (fig. 2, item 74).

31. In referring to claim 25, Locklear shows a means for managing the policies stored in the storage device (fig. 2 76-86).

32. In referring to claim 26-28 Locklear shows data looping in the system, before session establishment is prevented (via session tables which select the most appropriate modem connection to handle session requests, col. 9 lines 55-67 and col. 7 lines 12-29).

33. In referring to claim 30-35, Locklear shows that data looping is in the system caused by session establishment, is prevented because the data accepted, including PPPoE active Discover Offer packets are forwarded to only the selected one of the at

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least two communications links and not to any non-selected ones of the at least two communication links (col. 5 lines 25-37, col. 7 lines 17-29, and col. 9 lines 55-67).

Conclusion

34. With regard to Applicant's interview request contained in the remarks files 10/27/2005, the Examiner does not feel that an interview at this time would advance prosecution. Applicant had an opportunity to amend the currently presented claims after the Office action of 7/27/2005, but chose not to. The disputed issues are clear, and the rejection has been maintained. Applicant is invited to formulate proposed amendments incorporating subject matter that Applicant feels would overcome the presently applied references and telephone the Examiner to schedule an interview if desired.

35. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Strange whose telephone number is 571-272-3959. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AS
1/14/2006



KRISNA LIM
PRIMARY EXAMINER